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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/518,492	03/03/2000	Ram Kudukoli	5150-37301	7614

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EXAMINER
VU, KIEU D

Jeffrey C Hood
Conley Rose & Tayon PC
P O Box 398
Austin, TX 78767-0398

ART UNIT	PAPER NUMBER
2173	

DATE MAILED: 01/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/518,492	KUDUKOLI ET AL.	
	Examiner	Art Unit	
	Kieu D Vu	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 January 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *167-284* is/are pending in the application.

4a) Of the above claim(s) *242-254,263 and 283* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *167-241,255-262,264-282,284 and 285* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Applicant's election without traverse of Group I, claims 167-241, 255-262, 264-282, and 284-285 in Paper No. 8 is acknowledged.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 167-218, 241, and 255 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 167 recites the limitation "the new graphical program" (first occurrence). There is insufficient antecedent basis for this limitation in the claim.

Claims 168-218 depend on claim 167; therefore, claims 168-218 are rejected on the same ground.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 272-282 are rejected under 35 U.S.C. 102(e) as being anticipated by Sojoodi et al ("Sojoodi", USP 6437805).

Regarding claims 272, Sojoodi teaches a system for programmatically creating a graphical program comprising a computer system including a CPU (200) and memory (204 and 206), a client program executing in the computer system, the client program performs API calls to programmatically create a graphical program (col 5, lines 28-30), a server program operable to receive the client program calls to programmatically create a graphical program and operable to perform the respective operations (col 4, lines 43-53).

Regarding claim 273, Sojoodi teaches that the server program executes on another computer system which is connected to said computer system via a network (Fig. 1A).

Regarding claims 274-275, Sojoodi teaches the creating a graphical program by obtaining a reference to a software component (col 58, lines 42-44) and invoking methods of the software component (col 6, lines 15-19).

Regarding claim 276, Sojoodi teaches that the server program is a graphical programming environment application (Fig. 1A).

Regarding claim 277, Sojoodi teaches a client graphical program which includes a graphical program creation node for creating new graphical program (col 5, lines 27-30).

Regarding claim 278, Sojoodi teaches a property node for getting property a property of the graphical program object (col 5, lines 48-52; col 6, lines 21-22).

Regarding claim 279, Sojoodi teaches an invoke node for invoking a method on the graphical program object (col 6, lines 15-19).

Regarding claim 280, Sojoodi teaches the connecting graphical program objects (col 57, lines 34-42)

Regarding claims 281-282, Sojoodi teaches a client program for creating a new graphical program which comprises means for instantiating the new graphical program (col 5, lines 28-32), means for adding an object to the new graphical program (col 38, lines 55-59), a means for getting or setting properties of the new graphical program or the object (col 6, lines 21-22); a means for invoking methods on the new graphical program or the object (col 6, lines 15-17).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 167-241, 255-262, 264-271, and 284-285 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald et al ("McDonald", USP 5966532) and Sojoodi et al ("Sojoodi", USP 6437805).

Regarding claims 167, 219, 256, and 264, McDonald teaches the creating of a first program, when executing, programmatically creating a new graphical program (col 3, lines 61-63). McDonald differs from the claim in that McDonald does not teach the creating a new graphical program by creating graphical program objects and by interconnecting these created graphical program objects. However, such feature is known in the art as taught by Sojoodi. In the same field of creating graphical programs,

Sojoodi teaches the creating a graphical program which creates graphical program objects (nodes) and interconnects these created graphical program objects (connects nodes) (col 5, lines 40-47). It would have been obvious to one of ordinary skill in the art, having the teaching of McDonald and Sojoodi before him at the time the invention was made, to modify the programming system taught by McDonald to include the creating and connecting graphical program nodes taught by Sojoodi with the motivation being to enable the system to create the second graphical program from objects.

Regarding claims 168 and 220, McDonald teaches the creating a new graphical program without any user input specification (automatically, col 3, line 62).

Regarding claims 169 and 221, Sojoodi teaches the new graphical program comprises a plurality of interconnected nodes which visually indicate functionality of the new graphical program (col 5, lines 40-47).

Regarding claims 170 and 222, Sojoodi teaches the new graphical program comprises a diagram portion comprising a plurality of interconnected nodes and a user interface portion (col 5, lines 40-47). McDonald teaches creating the new graphical program includes creating the block diagram portion and the user interface portion (step 266 in Fig. 5).

Regarding claims 171 and 223, McDonald teaches the new graphical program comprises a data flow diagram (inherent).

Regarding claims 172 and 224, McDonald teaches the new graphical program is a virtual instrument (col. 11, lines 4-7).

Regarding claims 173 and 225, McDonald teaches the executing the first program in a first computing environment; said first computing environment is

connected to a second computing environment (inherent from step 202 in Fig. 2); said executing the first program comprises sending information from the first computing environment to the second computing environment (step 202 in Fig. 2); and the new graphical program is created in the second computing environment (col 11, lines 18-19).

Regarding claims 174 and 226, McDonald teaches the specifying the creation of the new program (col 3, lines 61-66).

Regarding claims 175 and 227, McDonald teaches the creating the new program partially based on the information received from the user (col 4, lines 11-19).

Regarding claims 176 and 228, Sojoodi teaches a system for programmatically creating a graphical program comprising a computer system including a CPU (200) and memory (204 and 206), a client program executing in the computer system, the client program performs API calls to programmatically create a graphical program (col 5, lines 28-30), a server program operable to receive the client program calls to programmatically create a graphical program and operable to perform the respective operations (col 4, lines 43-53).

Regarding claims 177 and 229, Sojoodi teaches the comprising a server program executes on another computer system which is connected to said computer system via a network (Fig. 1A).

Regarding claims 178-179 and 230-231, Sojoodi teaches the graphical program includes a block diagram, wherein the at least one graphical program object is a function node or a programmatic structure placed in the block diagram (col 16, lines 15-17).

Regarding claims 182 and 234, Sojoodi teaches a connection between input of a first graphical program object and an output of a second graphical program object (col 15, lines 26-31).

Regarding claims 183 and 235, McDonald teaches the creating one or more user interface objects wherein the one or more user interface objects perform one or more of providing input to or displaying output from the new graphical program (col 4, lines 3-7).

Regarding claims 184-185 and 236-237, McDonald teaches user interface panel (front panel objects or controls, col 4, lines 3-7) for providing input to or displaying output from the new graphical program (col 4, lines 3-7).

Regarding claims 186 and 238, McDonald teaches the obtaining a reference to a graphical program object (col 19, lines 4-6).

Regarding claims 180-181, 232-233, and 268, McDonald teaches the comprising a structure node (col 16, lines 25-27).

Regarding claims 189, 257, and 269, McDonald does not teach that the first program is a first graphical program. However, such feature is known in the art as taught by Sojoodi. Sojoodi teaches a system for accessing object capabilities in a graphical program (col 5, lines 28-32). It would have been obvious to one of ordinary skill in the art, having the teaching of McDonald and Sojoodi before him at the time the invention was made, to modify the programming system taught by McDonald to include the first graphical program taught by Sojoodi with the motivation being to enhance the visualization of the graphical programming system.

Regarding claims 190, 218, 270, and 271, Sojoodi teaches the first graphical program includes at least one object creation node for programmatically creating at least one graphical program object (col 5, lines 27-30)

Regarding claims 187, 191-192, and 239, Sojoodi teaches the first graphical program further includes a property node and the property node getting or setting a property of the graphical program object (col 5, lines 48-52). Sojoodi also teaches the object creation node outputs a reference to the graphical program object (col 5, lines 66-67).

Regarding claim 193, Sojoodi teaches an invoke node for invoking a method on the graphical program object (col 6, lines 15-19).

Regarding claims 188, 194, and 240, Sojoodi teaches the object creation node outputs a reference to the graphical program object, the invoke node receives as input the reference to the graphical program object and the invoke node invokes a method on the graphical program object specified by the reference to the graphical program object (col 5, lines 53-65).

Regarding claims 195-196, Sojoodi teaches the connecting the graphical program object to another graphical program object in the new graphical program (col 5, lines 41-47).

Regarding claim 197, Sojoodi teaches moving the graphical program object to another location in the new graphical program (col 56, lines 38-41)

Regarding claims 198-199, Sojoodi teaches displaying the object creation node; specifying a graphical program object class for the object creation node (col 13, lines 47-56)

Regarding claim 200, Sojoodi teaches the specifying position information to the object creation node (col 15, lines 32-36).

Regarding claims 201-202, Sojoodi teaches specifying owner reference information for the object creation node, the owner reference information designates an owner entity (col 15, lines 32-38).

Regarding claim 203, Sojoodi teaches the first graphical program includes at least one object creation node for programmatically creating the new graphical program (col 5, lines 27-30)

Regarding claim 204, Sojoodi teaches the displaying the graphical program creation node (col 5, lines 27-30, and specifying graphical program type (col 6, lines 12-15).

Regarding claim 205, Sojoodi teaches the graphical program creation node includes a type input (inherent).

Regarding claims 206-207, McDonald teaches a template graphical program wherein said creating the new graphical program comprises creating the new graphical program based on the template graphical program (col 3, lines 63-66).

Regarding claims 208-209, and 265-266, Sojoodi teaches the specifying a reference to a server program for the graphical program creation node (col 5, lines 8-10).

Regarding claim 210, Sojoodi teaches a server program reference input (VI Server Refnum Control 274A in Fig. 37)

Regarding claims 211 and 267, McDonald teaches the executing the first program in a first computing environment; said first computing environment is connected to a second computing environment (inherent from step 202 in Fig. 2); Sojoodi teaches the specifying a reference to a server program for the graphical program creation node (col 5, lines 8-10).

Regarding claim 212, Sojoodi teaches a graphical program creation node operable to programmatically create the new graphical program (col 5, lines 41-46) and configuring the object creation node with one or more inputs (col 5, lines 48-53).

Regarding claim 213, Sojoodi teaches the graphical program creation node outputs a reference to the new graphical program (line 66 of col 5 to line 1 of col 6).

Regarding claims 214-215, Sojoodi teaches a server reference for the graphical program creation node (VI Server Refnum Control 274A in Fig. 37).

Regarding claim 216, Sojoodi teaches specifying an object class for the object creation node (col 13, lines 47-56), specifying position information to the object creation node (col 15, lines 32-36), and specifying owner reference information for the object creation node (col 15, lines 32-38).

Regarding claim 217, Sojoodi teaches plurality of object creation nodes and graphical program objects which are connected (col 5, lines 40-47).

Regarding claims 241 and 284, McDonald teaches a first program, when executing, programmatically creating a new graphical program (col 3, lines 61-63).

McDonald teaches a template graphical program wherein said creating the new graphical program comprises creating the new graphical program based on the template graphical program (col 3, lines 63-66). McDonald differs from the claim in that McDonald does not teach that the first program is a first graphical program and the creating a new graphical program by creating graphical program objects and by interconnecting these created graphical program objects. However, such feature is known in the art as taught by Sojoodi. In the same field of creating graphical programs, Sojoodi teaches the creating a graphical program which creates graphical program objects (nodes) and interconnects these created graphical program objects (connects nodes) (col 5, lines 40-47). It would have been obvious to one of ordinary skill in the art, having the teaching of McDonald and Sojoodi before him at the time the invention was made, to modify the programming system taught by McDonald to include the creating and connecting graphical program nodes taught by Sojoodi with the motivation being to enable the system to create the second graphical program from objects.

Regarding claim 255, Sojoodi teaches the creating a first program which includes reference to an existing graphical program (col 54, lines 18-30) and modifying the existing graphical program in response to the execution of the first program (col 18, lines 63-67).

Regarding claim 258, Sojoodi teaches the first program is a text-based program (col 15, line 1).

Regarding claim 259, Sojoodi teaches a method call (col 31, lines 39-41).

Regarding claim 260, Sojoodi teaches the text-based program obtains a reference to a software component (col 58, lines 42-44).

Regarding claim 261, Sojoodi teaches the software component interfaces with a server program (col 14, lines 41-46).

Regarding claim 262, Sojoodi teaches the software component is an ActiveX component (col 57, line 62).

8. Applicant's arguments on Paper No. 5 with respect to McDonald reference have been considered but are moot in view of the new ground(s) of rejection.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kieu D. Vu whose telephone number is (703-605-1232). The examiner can normally be reached on Mon - Thu from 7:00AM to 3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca, can be reached on (703- 308-3116).

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703)-872-9306

and / or:

(703)-746-5639 (use this FAX #, only after approval by Examiner, for "INFORMAL" or "DRAFT" communication. Examiners may request that a formal paper / amendment be faxed directly to them on occasions)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703-305-3900).

Kieu D. Vu

01/11/04

JOHN CABECA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100